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Poise *and* Symmetry of Figure

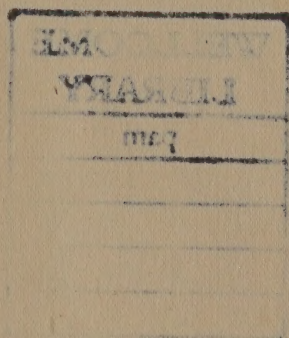
Obesity
Leanness—
their causes and effects

Susanna Cocroft

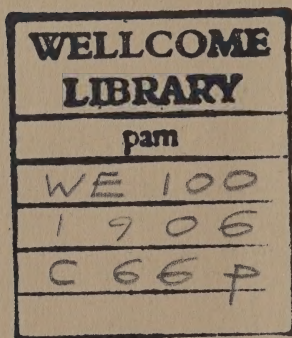


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POISE
and
SYMMETRY OF FIGURE



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CORRECT POISE

POISE *and* SYMMETRY OF FIGURE

"No woman is to blame for not being beautiful at sixteen,
But she has only herself to blame if she is not beautiful at forty."

—*Fra Lippo.*

True beauty is in a radiant soul shining through a pliable, expressive, graceful body, and this radiant spirit is developed and encouraged in its growth, as we cherish and cultivate habits of beautiful thoughts, and of unselfish giving of self to others. Each kindly act feeds and nourishes the spirit which prompts it, each kindly thought is a little seed which grows and blossoms in many times its own.

It is a woman's privilege to surround herself with refining, educative influences in nature, and in art; each artistic expression instigates a beautiful thought and speaks to the soul in language too subtle for words. It is her delight to so combine color and form in her home as to make it an expression of the art within her own nature; but often she wears herself out in the effort, forgetting that she should be the most artistic expression there; forgetting that within herself she should express more of truth and beauty in her speaking, breathing, delicate flesh than any artist can portray in cold marble or paint. The pictures on her walls are confined to place, but the sister, the wife, the mother; is the moving picture—the ever-present influence, and her beauty, her grace, her charm of manner speak to us in the silent hour when

the human voice is hushed. Her very charm of movement lingers with us, as a delicate perfume; it elevates, educates and refines—it lifts men and women above the commonplace.

It is the spiritual influence of our friend which we feel when away from her, and the expression of this spirit in movement and in voice. It is the fragrance of the entire rose which enthralls, not the odor of the individual petals. The sentiments, the emotions instigated by the thoughts of a lifetime, make up the fragrance, the influence of a life. It may be a fleeting expression of countenance, a characteristic movement of the hand, or an inflection of the voice of a friend, which comes to us when absent, but usually it is the movement, the expression, the charm of the entire body which first recalls her to us and which lingers longest with us.

Physical beauty is not alone in regular features, in the color of the eyes or in the whiteness of the teeth; it is in the subtle charm of manner which eludes us whenever we try to define it, in the dainty grace and rhythm of movement, which speak to soul, not eye, not ear.

**Symmetry
of Figure.**

A symmetrically proportioned figure, well poised and gracefully carried, with a healthful, vibrant body, rosy cheeks and sparkling eyes is more effective than a pretty face; it expresses culture and refinement, while merely symmetrical features may hide a shallow nature.

Few women have regular features, all may have good figures, well groomed and wholesome. No woman needs take her figure for granted. She can make herself as attractive, expressive and magnetic as she wills. In early life, before the bones have hardened, even their shape may be changed, and all through life the adjustment of the bones in their sockets and the shape, quantity and contour of the flesh may be altered—even at the age of ninety.

**In Her Prime
at Fifty.**

Why should a woman, just because she has lived fifty years, expect or take it for granted that she lose her figure or look old and wrinkled? In your own circle of acquaintances you may know some

woman who seems never to lose the attractions and the buoyancy of youth. You knew her years ago, and see her now, still young, still beautiful, still gracious, still like a magnet—drawing to herself the attentions of all who come within her sphere.

Such women as Madame Patti, Madame Bernhardt, Madame Rhea, Modjeska, Cleopatra, of world-wide reputation, and thousands of others known within a smaller radius, were at the zenith of mental and physical powers at fifty or sixty, but they gave daily time to physical exercise and attended daily to hygienic rules in the care of their bodies. Did it not pay these women to take a little time for the care of the physical so as to keep themselves young? Was not their influence greater? Did not their lives count for more than if they had broken down at fifty because of careless negligence of their physical organism? Would not every woman's time count for more in the end, with a few moments of daily, intelligent care upon her health and appearance? There are more Madame Pattis, more Madame Bernhardts than the world dreams of—they need but to recognize the qualities, the possibilities within themselves, and then intelligently set to work to develop them, realizing that perfect health is the first requisite of success.

The years take so little, they seem but to add the charm of experience. The cycle of fifty years means maturity of thought, and woman should realize that, if she preserves the harmonious use of muscle, vital organ, nerve and brain, when she does break down—at what age who shall say?—certainly not at three score years and ten—there will be a general giving out of all tissues, and old age will be the beautiful, happy fruit of the past; the end will simply be a restful waning of vitality until the light quietly flickers; then the dreamless sleep with the awakening in the life beyond.

Art Within
Self.

Many of these women are of artistic temperaments and love to be surrounded by the beautiful, but their own physical angles or overloaded curves constantly grate upon their finer sensibilities. All of these

angles can be made into symmetrical, well-rounded lines by intelligent attention to the right exercise, rested nerves and digestion, and any woman can round out these curves for herself, or remove the burden of fat, if she will correct the cause. A small portion of the time spent upon unnecessaries, or upon art in the abstract, would bring the artistic expression within herself, where it is an ever-present source of satisfaction.

Woman wears herself out at art galleries, becoming a nervous, angular wreck in the assiduous cramming of the brain with beautiful ideals expressed on canvas or in statuary—forgetting that the Creator is the great Artist, and that His most perfect expression is in her own form of pliable, mouldable flesh; forgetting also that she has as much right to ruthlessly destroy a valuable painting in the art gallery as to despoil the beauty of contour of her own figure. A woman's form once beautiful, and that beauty lost, reminds one of a valuable picture lost or stolen from an art gallery. We are not our own, we were "bought with a price."

The human form is the most artistic expression of art in Nature—it is God-given—all other art is but finite imitation, and every time a member of one's family, a friend or a stranger looks upon it, it should be as educative, as refining as a beautiful painting. The time is approaching when woman will turn to the study of art in her own expression, as well as in clay, in marble, and on canvas.

Is it not just as much a woman's duty to add to the beauty as to the use of the world?—and who shall say that true beauty is not use, since it educates, uplifts, changes thought and develops character?

**Men Have
More Artistic
Sense.**

Men seemingly have more artistic sense of art in the human form than woman. They have not the time to spend in art galleries, but they appreciate the art galleries brought into their homes, and while they toil, that wife, sister or mother may have time to study and to beautify the home, she should not forget to bring the beauty she studies within herself.

A man likes to be proud of the woman who means

the most to him, be she wife, mother, sister or sweetheart. He turns to look at a beautiful figure and a sprightly carriage, while he would pass by hundreds of women without a glance who are out of proportion and who carry themselves carelessly and indifferently. Do not impute to that man a wrong motive; his artistic sense is aroused; his very soul awakens; he sees the expression of his innate love for the beautiful in form and movement.

The majority of men see things in the entirety, not in detail. A man will remark upon the style of a certain person who impresses him, but he could not tell you the color of her hair, whether she wore blue or green, or whether her gown was cut after a certain model. He does know, however, that she has a vivacious manner, a trim, stylish figure, and that she carries it well.

Pity the man who is so dead that he is not moved by a beautiful statue or a beautiful picture; pity him more if he is not moved when these beautiful outlines are expressed in living, breathing flesh, with the added attraction of warmth, color and movement. The man who does not appreciate a beautiful woman has had his artistic nature dwarfed or crushed.

Are you at your best, so that the one who means the most to you may be proud of you? If not, why not then awaken to your possibilities?

Environment. One has more patience with almost any lot in life than that of the common woman, who is contented to stay common, who cares nothing for her appearance or her influence upon others, and who forgets to look for the beauty in the simple things of life. Some women have had better advantages for growth than others, but a woman's environment is read not alone in her features, but in her carriage, and in her very manner of wearing her clothes. Lack of development, because of environment, is not to be condemned so long as woman shows her inclination to be at her best in the position in which she is placed. Many an intelligent farmer's wife or daughter puts to shame the city woman, with all her

advantages. Her very bearing and outlines show strength at the kernel, more definiteness of purpose and more beauty of spirit. When given the opportunities of the city woman she improves them to more purpose.

Culture is not expressed in the clothes which a woman wears but in the dignity with which she wears them. The girl behind the counter often expresses more of true refinement than the woman of wealth whom she serves.

The Infant
a
Perfect
Model.

Except in the case of a few unfortunates, each little life launched into the world is given a perfect body, with a natural tendency to grow with vital organs in correct proportion, and with perfect outlines, from which artists and designers mould all models and curves. The hinges for doors were first modeled from the joints; the idea of strength in ropes and cables, gained by interweaving separate fibres, was from the strength expressed in the interweaving of muscular tissues.

With judicious use of food, air and water, necessary for rebuilding, with sufficient exercise to keep all vital forces free and the blood circulating strongly, so that all impurities are eliminated, and so that the nourishment is carried to each part, the body will grow as the most perfect work of the Creator's expressive art. We are given an intelligence to keep it in its natural state so that obstructions or weaknesses may not trammel the mental and spiritual growth. How few women use this intelligence!

As you stand at a window, of a hundred women who pass your vision how many do you see whose natural outlines conform to the correct lines and poise of Figure 1? Why do ninety per cent of women fall below the normal in figure? Is it not partly a lack of scientific knowledge of the necessity of keeping the body in an upright attitude, so that each vital organ may have adequate room and that the flesh may distribute itself evenly,—or is it a lack of pride,—or a lack of development of the artistic nature,—or of the application of the artistic ideals to self?

**Every
Woman Can
Have a Good
Figure.**

There are few women whose pride and self-respect are so dead that a buoyant, sprightly, trim, well-rounded figure does not fill them with admiration. The difficulty is that they are not conscious of their possibilities, or are woefully indifferent.

When a woman realizes that she can be of just as good a figure, with as charming a manner and as magnetic a presence, as any women of her acquaintance, that her figure depends entirely upon herself, she will let go the old notion that "It must be natural because she grew so." Her pride will be aroused and she will correct it. No woman should stop short of her best.

Almost every woman can be made as supple and artistic in expression as any figure which artist or painter can portray. It is the right of every woman, and can be regained and maintained by every woman who has not been actually deformed by accident before or after birth. "Every woman" is used advisedly, because women most grotesque in outline, whose flesh has accumulated in parts of the body most objectionable, with large hips which shake from side to side with each step, with double chins, "rolling in billows as an accordion whose music has been spent," are ridding themselves of their burdensome fat and their entire outlines are assuming natural proportions.

The photograph from which the outline of Figure 2 was made was taken June 1st and that of Figure 3 was taken October 1st of the same year. The outlines are exact reproductions from the photograph, and prove beyond a doubt what a woman with strength of character and a definite purpose can accomplish, with the exercises, breathing, bathing and diet adapted to her condition.

Thin, angular, nervous, agitated women, with narrow chests, bony necks, no breasts, and jerky in movements, are growing to dimpled roundness—and in the changing of these figures the entire expression of the face changes, in truth, the entire mental vision changes because a new life is opened; the thoughts change as the eye rests upon beauty and the mind dwells upon health.

Figures 33 and 34 show the change in development, life and purpose which one girl wrought within mind and body in a few months' attention to the diet, rest and exercises prescribed for her. A life of comparative content, based upon the knowledge of growth and the consciousness of beauty and art within herself, has opened up, coupled with the satisfaction that she has made the most of her talents and of her capacity for beauty, both of character and of figure.

A Good
Figure is
Economy.

From a mere standpoint of economy a good figure pays. As long as woman must spend so much of father's, husband's, brother's or her own hard-earned money for gowning the figure, she should have the intelligence to keep it in symmetrical proportions and to carry it well. Considered as merely a figure on which to hang a dress, it pays to trim down or to round it out that the dress may show off to advantage. Better take a little of the money spent upon frills and bustles to fill out the gown or upon the corset to keep the flesh within bounds, and put it into instructions for its correction.

Do Not
Depend Upon
the Corset.

Do not depend upon the corset to make a good figure; you may ruin your health in so doing. When your outlines are right, a corset should be made to fit you and to follow your own graceful curves. If the corset is holding you in, remember it is also pressing upon vital organs, retarding their free action and weakening muscles about the organs themselves; anything which retards the free action of the vital organs, compresses the diaphragm, restricts free breathing, and interferes with the free elimination of waste, which is sure in time to effect the complexion, because if the impurities are not thrown off through other channels the skin is overworked.

The physician who recommends the abdominal belt or straight front corset, as a support for the organs, is aggravating the difficulty by further weakening the muscles and the vital organs, and in a few weeks or months his patient will go back to him for medicine for the organs thus weakened or seek a physical culture teacher to

strengthen the muscles. The permanent relief is in regaining the muscular strength, thus enabling the weakened organs and muscles to support themselves.

When a woman patient calls a physician, she does not always tell him of natural causes which have resulted in her weakness and which are apparent to the intelligent teacher of physical culture—dress-pads, bustles, etc., are misleading. The physical culture teacher is guided by natural lines and the natural position and room for vital organs; she knows the causes and results of displacement and the resultant imperfect functioning of the organs misplaced. *

Style in
Carriage.

Clothe a woman of a healthy, wholesome body, well groomed and well carried, in the simplest shirt-waist and a neat skirt; she has more style than one in the richest garments who is out of proportion and who stands incorrectly. Style is not in the gown nor in the fabric, but in the figure, poise and carriage, as will be readily seen by referring to illustrations referred to below. It is one thing to have good clothes; it is another to know how to wear them.

If a woman who stands out of poise learns to carry the gowns she wore last year, they will be as new gowns. Is it not better to spend more time and money in the correction of one's own figure and carriage and less upon clothing, and upon the study of how to cover the angularities by ruffles and frills, or of how to make the flesh appear less redundant by straight lines. Each garment one puts on will then look well, and the more simple the gown the more style in the effect.

A woman out of position, with shoulders drooping, head and hips forward and a resultant relaxed position of the knees, can never lend style to clothing as shown in Figures 6, 8, 10 and 13; a woman who carries herself well dressed in a simple gown, may change dresses with the woman out of poise and the dress at once takes on a style of which the owner had not dreamed; you scarcely recognize the coat of Figures 21 and 22 on Figure 23, or the gown of Figures 9 and 20 on Figure 8. Note the con-

*Publisher's Note: See Miss Cocroft's lecture upon "Effects of Poise upon Health."

trast in the hang of the skirt in Figures 6, 8 and 10, standing with the abdominal lead, with the hang of the skirt on Figures 7, 9 and 11 in correct poise. One would scarcely recognize the same skirt. Again, note the contrast in the appearance of a shirt waist suit in Figures 13, 14 and 16. Figure 14 shows the body tipped back from the waist line (sway-back), bringing the stomach into prominence, while Figure 13 shows the abdominal lead by reason of the displaced thigh joint and the depressed chest. Figure 16 shows the effected kangaroo attitude.

Figures 8 and 9 show the change in the style of the back of a gown effected by the poise.

In contrasting the style of the more expensive gowns of Figures 6, 8 and 10 with the simple ones of Figures 12, 18 and 19, one realizes the economy of standing correctly in order to give style to any gown.

A woman may be across the street, so that her features are not discernible, yet we at once form an idea of that woman's general cultivation and refinement, not by her clothing so much as by her movement, her figure and her poise.

Style in Coats.

It is worth while some day to step into a coat room and watch three women try on the same coat; it is a different garment as it is donned by each woman.

Figures 21, 22 and 23 are of nearly the same measurements, but Figure 21 is sway-backed while Figure 22 relaxes all muscles in the front of the torso. Garments on sale in the stores, are, as a rule, made in normal proportions and fit the normal Figure 23. The woman in Figure 23 formerly stood in the attitude of Figure 22.

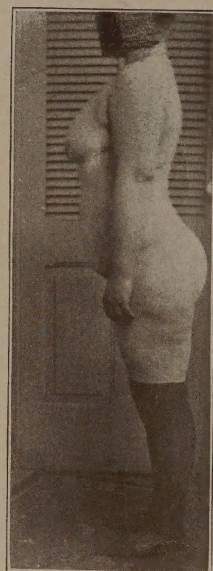
While in the coat room you may perchance see a well-dressed man come in with his wife; his head is well poised upon square shoulders, a full chest and a carriage which expresses prosperity, self-confidence and achievement. His wife is intelligent, and with fair health, rested nerves and a proper appreciation of herself and of her position, she is capable of keeping her place by his side as he makes her social position by financial and business success; but she is thin, care-worn, patient and tired. He is evidently interested in her appearance or he would



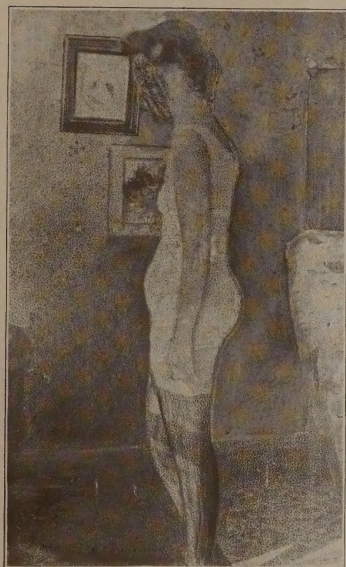
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1



3



4



5

FIGURE 1 ILLUSTRATES CORRECT POISE.
 THE REDUCTION OF FIGURE 2 TO FIGURE 3 WAS MADE IN FOUR MONTHS. SEE PAGES
 9 AND 34.
 THE CHANGE OF FIGURE 4 TO FIGURE 5 WAS MADE IN FIVE MONTHS. SEE PAGE 20.



6



8



10



7



9



11

THE EFFECT OF CORRECT POISE UPON THE STYLE OF A GOWN IS ILLUSTRATED BY CONTRASTING FIGURE 6 WITH 7, FIGURE 8 WITH 9 AND 20, FIGURE 10 WITH 11. SEE PAGES 11, 12 AND 16.

not be there, because nine chances out of ten he does not love to shop. He expresses a strong physical manhood, literally buoying up the worn-out, tired body and spirit of the life which has been given completely to him, or to the duties which her life with him has encompassed her.

She tries on coat after coat and turns questioningly, appealingly, for his approval; but he shakes his head. The model for the coat department tries on the coat and his face beams, the coat seemingly has a style which pleases; his wife puts it on again and his face falls; it does not seem to be the same coat. The contrast is pitiful. She has allowed her figure to become so much out of shape that it spoils the style of any garment.

He is fond of her; she is the patient wife and home-keeper; she is the mother of his children, but she has made herself a drudge. At home he is used to it. Away from home is he proud of her? Wives, think upon these things! Let a little of the drudgery, which has become your habit, go; give a few minutes of the 1,440 minutes a day to the care of yourself; let your family wait upon you, instead of being their page; spend a little time upon your health before you lose it; make yourself look well in your clothes rather than to spend so much time in making clothes look well upon you; learn to live simply. It is more to grace a simple meal than to prepare a sumptuous one and then be too tired to lend cheer to it.

Duty of a
Wife.

A wife, a mother, mistakes her duty in giving her all to her children and to her husband at the expense of her health, and consequently her appearance. To do her best for them she must keep a strong, calm, mental poise; she must be their inspiration and example, and she cannot do this if her health and strength give out. With a strong, vigorous body and a clear mental poise, work and care are a pleasure, not a drudgery. No husband, no child, wants the wife, the mother to so sacrifice herself; why does she? Should she not use reason in the care of the home of her soul as well as in the care of the clothing for bodily comfort?

Her husband may be struggling as a business man to gain prestige and success, and his wife helps him won-

derfully if she expresses this prestige and success in her own personal appearance; not in tawdry show but in bearing, in figure and in a carriage expressive of culture, dignity and refinement, which the world sometimes considers as elements of business success.

Why should a wife, after the first few months of married life, grow careless of her personal appearance? Some one has said, "Any fool can catch a man, but it takes all her wiles to hold him;" to keep him contented after he is caught, and to keep the home atmosphere wholesome, attractive, helpful and buoyant. He is polite and he says he is satisfied; but it is his admiration, his satisfaction as he compares her with others, his consciousness that others admire her also, which every woman justly prizes. To hold his love, his admiration, and the consequently happy home atmosphere, there must be sweetness and strength at the kernel when the first glow of the peach is removed. It means depth of character and quiet patience. The wife and mother today must be an angel of strength, unselfishness and love, and she must show a desire to progress with her husband.

While the care of furniture and food means much, the home atmosphere means more, and no woman can be at her best unless she give a part of each day to the care of self, of health, figure and bodily expression.

It is the little things which make for happiness; the constant movement of a graceful, symmetrical figure about the home educates, elevates, refines more than all the statues or paintings money can buy. This is beyond value and beyond price. Money cannot buy grace or a good figure, but any women can attain both by persistent effort.

Do not settle back into lassitude, allowing little material cares to crowd upon you and bury your integrity and individuality.

Duty to
Herself.

During the active years of life the noble, unselfish woman is giving and doing for others; she is building for herself a bulwark of friendships and love which shall be her capital and yield rich harvest in her waning years. But she makes a mistake in giving

to the limit of her strength, and at the expense of her appearance; each day she should recuperate all force wasted during that day; each day she should give daily care to the strength force and clean working of the vital organs if she would be at her best, so as to accomplish the most in the least time for her family and her friends. The unselfish giving beyond the daily strength is mistaken, short-sighted unselfishness.

A woman's plain duty is to keep young, well and strong, and to heed and correct the first danger signal of disorder within.

By keeping her own integrity of body and spirit she holds the love of husband and family more spontaneously. Wives, do not make of yourselves physical slaves, but rather enslave your husband and children by holding their love and admiration. You make selfish children by enslaving yourself for them; you develop the best in them by teaching them to admire and to wait upon you.

**Physical
Poise.**

I cannot too fully emphasize the importance of correct poise and carriage as affecting the vital organs, the nerve centers, the freedom of the lungs and the action of the heart.* In order that no one set of muscles or vital organs may bear the weight of another, the bones must be properly adjusted in their sockets. Figure 1 shows the proper adjustment of bones, with head erect and an even distribution of flesh; yet no more than ten per cent of women stand correctly in an attitude expressing uprightness, womanly dignity and self-poise.

The habit of sitting with the weight on the end of the spine, as in Figure 17, brings the thigh joints forward and cramps and relaxes the muscles about the waist and in front, so that in order to maintain the equilibrium when one rises from a sitting posture, the chest bone is depressed, the head forward, and the weight rests upon the heels. Figure 18 shows correct poise in sitting.

Walking is not good exercise unless one stands and

*Publisher's Note: The causes and effect is taken up scientifically and exhaustively in Miss Cocroft's lecture of this series, published in connection with the Body Manikin.

walks correctly, because in the walk of the average woman the spine receives a jar with each step, and the action of the nerve centers is interfered with; then, as one walks, the back of the heel strikes the ground first, and with each step the vital organs, which are out of position, are shaken and the supporting ligaments weakened, often dislocating the more delicate organs. One can never walk correctly until the proper balance and the correct poise in standing have become a habit.

The high-heeled boot is not an aid to poise. It stilts the weight of the body forward unnaturally, while every muscle and vital organ is straining to go back to the habitual poise. This strain is particularly felt in the pelvic organs.

In the correct physical poise, when all bones are properly adjusted in their sockets and all vital organs are in place, a perpendicular line opposite the ball of the foot will touch the front of the hip bone, the front of the shoulder and the front of the ear, as illustrated by Figure 1. The average woman stands with the thigh joint from two to six inches forward of the front of the shoulder.

In attempting to hold the upright attitude many women go to extremes and bring about a stilted, affected poise, appearing awkward and self-conscious. A natural, easy poise can only be regained by uniform development of all muscles, then the body will be held in position without conscious effort. When the correct attitude is once regained the old attitude will be more uncomfortable than the corrected one now is.

Poise means balance, and while the physical poise is, to a certain degree, the result of mental and spiritual poise, the physical attitude also reacts upon the mind, producing a mental poise of which the physical poise is expressive.

Figures 6, 8, 10 and 13 illustrate the common careless attitude of slouching the thigh joints forward, and the chest and head droop forward to keep the equilibrium. This attitude becomes a habit in women who lack vital strength or the proper amount of pride.

Figure 14 is a fault into which women fall who have sufficient pride to stand correctly but who have not been taught the upright position. The attitude tips the body back from the waist line, thus curving the middle spine too far inward and bringing the waist line into prominence. While the attitude is faulty, it is preferable to the careless attitudes, because not so disastrous in its effect upon the health.

**Head and
Shoulders.**

The hollows at the base of the neck and across the chest, unless due to a lack of flesh, are occasioned by the faulty carriage of the head and the shoulders. Rounding shoulders, in almost every instance, are accompanied by a displacement of the thigh joint, by an incorrect poise of the spine, of the knees and of the ankles. In fact, if only the position of a woman's head be shown, the poise of the knees, of the thighs, of the vertebrae and of the ankle joints can be told, because one joint out of poise means that the other joints are thrown proportionately out to enable the body to keep its equilibrium. The fallacy of practicing just a few exercises to fill out the neck will be readily seen, as the entire poise must be corrected.

It is interesting to watch the head carriage of the people with whom one comes in contact, and to note how many necks incline forward, which makes the head seemingly grow diagonally from the front of the body, instead of growing as a flower from the top of a stem. The head should grow up to the light as the tall trees of the forest reach upward. A strong, straight back, with an upright carriage of the head, adds much to a woman's dignity and self-poise and reacts upon the mind, yet so few backs are straight, especially in the upper vertebrae. In Figure 1 the head and shoulders are in correct position.

Mothers are constantly asking growing children to throw their shoulders back, but in so doing they do not tell the child how to put them back. In almost all cases of rounding shoulders the child must be first taught to strengthen the muscles of the chest, over the stomach, the back, and, in fact, the muscles of the entire torso.

Then he must be taught how to carry his head and his hips, as well as his shoulders, if they are to stay in position.

**The Mother's
Duty.**

When the mother realizes that the child unconsciously copies her physical poise and by this unconscious imitation grows into an abnormal attitude which affects his character, she will see the importance of making this correction within herself. * Every mother who stands before her child in an attitude of dependency and discouragement, with drooping chest, head down, rounding shoulders and protruding abdomen, is carrying a heavy responsibility in regard to the entire future life of that child.

**Health Rests
with You.**

Good health is every woman's birthright, and you are entitled to your share of it. Realize this. Medicine is only temporary relief for acute ailments. Permanent health rests with you, and the appropriation of your share of sunshine, judicious exercise, fresh air, water and the kind of food adapted to your needs. You can regain your health unless tissues have entirely wasted away, and you can retain it.

Some one has said: "A woman is either a fool or her own physician at forty."

As long as bacteria prey upon us, and as long as the human race is careless and negligent, there will be need of materia medica, but before middle life, every woman should know how to keep in health, so that medicine will seldom be needed. When correct habits of exercise, breathing, bathing and diet are established, in nine chances out of ten the physical ailments will disappear.

The true physical culturist must have as thorough an understanding of anatomy and physiology as a physician, and be able to direct exercises to any vital organ which may be weak. The liberation from physical weakness reacts upon the mind and the feeling of victory, freedom, expansion, the conscious lifting of self out of physical bondage, is the greatest result of physical work.

*Publisher's Note: See Miss Cocroft's lecture upon "Reading of Character Through Bodily Expression."

**No Time to
Preserve
Health.**

Women say they have no time to care for health and figure. No time? Oh, shame! If you would be strong mentally and spiritually you must keep the physical body strong that it may not trammel your growth. Woman has time to spend hours embroidering a doily for her table or hosiery for her husband. Is he not properly appreciative?—possibly he prefers the rested, happy wife. She spends much time putting together various condiments in the form of pastry and viands, which ruin the digestive system of husband and children. Two intelligent-looking women recently spent an hour in discussing whether the starched clothes should be washed before the sheets and pillow cases.

Which counts for the most to-day: the cleaning of a certain amount of wall space? the dusting of so much furniture? the darning of various small garments? or the maintenance of your individuality, self-respect and your family's pride in you?

After you have regained health and outline, fifteen minutes a day is all you need to keep vital forces strong, your brain clear and your figure in good proportion. You will not miss the fifteen minutes, while you will retain your self-respect and the pride of your husband and children. You will save many times fifteen minutes in efficiency; there will be no wasted, languid effort; when you work you will accomplish, when you lie down you will rest.

**Young
Women.**

Be genuine, girls. Develop your figure and learn to carry yourself well; refuse to wear false hips, bust forms or bustles; the natural figure will not develop if you do. All hail to the athletic girl with the buoyant step, the rosy cheeks, the bright eyes, and the magnetic vitality which speak to us of the breezes of the forests! Learn to take a pride in a vigorous strength and vitality which will make you impervious to draughts and colds—or if you do catch cold at an unguarded moment, to show your self-mastery and vitality, which enables you to throw it off in a few days. The day of the clinging vine has passed; your friends are not interested in your ailments, excepting to help you out of them.

The health of the young girls of to-day means everything to the next generation, and every girl is entitled to the capital of good health as her start in life. Unfortunately, she receives little or no training from her parents or teachers in the knowledge of how to keep well. She is taught many dead languages, geological formations, or the movement of the spheres; she is taught to admire the health and the figures of the athletic Spartan women; she is taught music and art, while the science, rhythm and art of her own body is neglected. Why is this?

If a young girl has any pride in self she wants to make a creditable appearance; the girl who does not is to be pitied—there is something lacking in her makeup. Every time she comes into another's presence she undergoes criticism.

Let us help her to be a strong, symmetrical flower, with head erect, graceful outlines, full chest and a good breathing power. Correct, natural development in a young girl effects the development of her character. The right-minded girls of to-day are to be the mothers of to-morrow. Do not dwarf them by allowing them to grow with cramped chests, drooping shoulders, lowering head and eyes.

Figures 4 and 5 show the change one young girl made in herself in a few months. One cannot look at these two outlines without realizing the change she has made in her entire views and purpose in life. As a reading of character, they bear much study. One cannot help loving the sturdy little figure. She took the photographs herself by pressing a bulb in her camera. She has formed healthful habits of breathing, bathing, diet and carriage, which means that she will grow to a strong, wholesome womanhood, free from the annoying ailments which seventy-five per cent of women suffer. The faces of the originals in Figures 2, 3, 4 and 5 are not shown, and no amount of influence would induce me to divulge their confidence; it is a sacred trust. The names of the other pupils will be given if requested.

**The Girl of
Fifty.**

The girl of fifty needs exercise, definitely prescribed for her, more than the girl of fifteen. She can work better in the privacy of her own room than in class, yet why should the woman who approaches middle life feel that her friends will smile if they know she is following any prescribed course of treatment to keep herself vigorous and well,—which means to keep young? It is a plain duty.

As the woman of fifty lets go her hold upon the material cares and duties of life, as she contemplates the fruits of these fifty years in her family, friends and worldly goods, she need not feel herself replaced and useless. She has reached the point where she can devote more time to herself, where she can regain the strength of every weakened organ, can regain the sprightly, buoyant step and trim figure which her husband loved in the heyday of courtship, and be free to lighten the burdens of those who have taken the reins in hand, by a cheerful, wholesome, helpful atmosphere.

The first fifty years have told in achievement in family and in worldly goods, with what time she has snatched for mental and spiritual growth. Her husband tells her he is entirely satisfied, yet his eyes beam with pride as she attains the sprightly step and the trim figure of earlier years. With what pride we hear him tell his friends that his wife is younger than his daughters. He realizes, too, that he must grow young to keep young with her; he must have no crippled muscles, no weak nerves, the blood must be sent bounding through his veins so that he may retain his strength and vigor.

The children so love to be proud of their parents—proud of their carriage, their bearing and general appearance. Can a woman afford to neglect this pride? Can she afford to be fat and a consequent burden to herself, or to look old and wrinkled and sallow? Why should she? Life holds too much for her to let go, or for her to be aught but a bright, positive, wholesome, helpful force.

The period of youth is spent in learning the ways of this world, in development of body and mind, and in establishing ideals; middle life continues the mental de-

velopment and achieves position, family, friends and money; while the later life is an enjoyment of the family, friends and money gained, with a happy anticipation of the life to come.

**Life Is
Lengthening.**

The span of life is lengthening, and instead of expecting to leave this world at three score years and ten, as Moses predicted, we now look forward to ninety or one hundred years. How beautiful is age when one grows old with all faculties alert and with a young heart! One is just as old as the heart is old. Many a young man of thirty is as old as his dear father of eighty.

As Charles Kingsley so forcefully said: "Ah! the waste of health and strength, especially in the young; the waste, too, of anxiety and misery in those who live and tend them! How much of it might be saved by a little rational education in those laws of Nature which are the will of God about the welfare of our bodies, and which, therefore, we are as much bound to know and to obey as we are bound to know and to obey the spiritual laws whereon depends the welfare of our souls."

If I have quickened within you a dormant desire to make the most of yourself physically, mentally and morally; if I have strengthened within you a purpose to be your best, to rise to the noblest within you, to keep body, mind and soul sweet, pure, free and wholesome, to express within yourself all that is uplifting, cultivating, refining and helpful; if I have strengthened your purpose to keep this body—the temple in which the soul abides—a clean, pure, fit dwelling-place for that spirit (which is so far beyond our comprehension that we can only in our consciousness now and then catch a fleeting glimpse of it); if I have created within you a desire to make this temple beautiful, as a feasting for your æsthetic nature; if I have strengthened your thought that it is as much your duty to add to the beauty as to the use of this world, I shall have accomplished my purpose. Let us remember Christ's injunction, "Be ye perfect even as I am perfect."

OBESITY.

ITS CAUSES AND RELIEF.

The woman who carries from twenty to one hundred pounds of extra weight each time she moves, deserves both sympathy and commiseration. Sympathy for the burden, for the sluggish mental action, which prevails in most cases of excessive fat, and commiseration for the ignorance of how to unload the burden, and in so doing experience relief and strength.

A sweet, womanly face, expressive of mental and spiritual strength, is entirely at variance with a grotesque figure, suggesting the predominance of the animal nature. **Fleshy women** have accepted their settled figures as their lots in life, not caring to take medicine for relief, for fear of injury to the digestive system, but with careful attention to the right exercises, which shall remove the fat where accumulated, and to judicious diet, any woman can rid herself of superfluous flesh, and establish a good poise and carriage, without looking wrinkled and old. She can reduce to stay reduced, if she will work sufficiently to change her habit of assimilation and then use ordinary care.

Metabolism. The study of nutrition and metabolism of the body has heretofore been left entirely to the medical profession; but the patient, as a rule, discharges her physician and trusts to her own limited knowledge after her acute pain is relieved; so that medical practitioners have become engrossed in the treatment by *materia medica*, to give quick relief from pain, rather than in the permanent relief of correcting imperfect metabolism by re-establishing circulation, distributing nerve force and directing proper nutrition by Nature's remedies of fresh air, sun-

shine, exercise, breathing, bathing and diet. The failure of physicians to prescribe for permanent natural relief has led to the establishment of the educated physical culture teacher, who has a thorough knowledge of the body and who is able to direct exercise to any weakened organ. Dr. Wm. T. Harris, U. S. Commissioner of Education, says: "The glory of the present revival of physical culture is that it is led by educated physicians. It means a synthesis of science with reform, and the end of the era of quackery in hygiene."

The importance of correct metabolism will be seen when it is realized that the origin of perhaps ninety per cent of diseases is due to abnormal action in renewing and relieving the waste of the body. By metabolism is meant the process of changing the intimate relation of the body cells, whereby its molecules become more simple or more complex.

The metabolic changes, whereby the food is converted into chyle and blood and put in condition to be taken up by the circulatory system, that it may become a part of the organized tissues of the body, is known as assimilation or anabolism. The storing up of an abnormal amount of adipose tissue is the result of abnormal or defective assimilation.

The chief factor at work in interfering with the conversion of the elements of the lymph into normal and proper cell structures, is probably in the nervous system. Of ten thousand women reduced during the past four years, at least eight thousand of these showed a weakened condition of the nerves. This is, in part, the result of the packing of fat about the nerves, causing sluggish nerve impulse, but the weakened condition of the nerves, and their consequent failure to instigate muscular activity, is also one chief cause for the storing up of fat; there is also less activity in using up the fat.

It is probable that the nerves do not materially influence the metabolic changes in the fatty globules, because it is a well-known fact that the cells of the body are active only when nerve fibres are in such intimate relation with them as to permit at all times a continued flow

of nerve impulse; but the nerves materially influence the tissues about the absorbing cells, and the amount of fat stored up is controlled by the activity of the tissues; this actively is dependent not only upon direct muscular exercise, but upon the nerve impulse given to the tissues.

Physiologists are not clear as to what effect the nerves have in changing the molecules of the cells into waste products, and especially are we ignorant of the process of the change.

In the small intestines the fat is mixed with the pancreatic juice and with the bile, which mixture makes a fatty emulsion, or soap formation. For this mixture it is necessary that the bile be poured into the small intestines, through the duodenum, just at the time the fat enters it. No matter how much fat is taken with the foods, only a limited quantity will be absorbed during any given period, depending upon the amount of bile and pancreatic juice secreted, and this is influenced by the activity of the pancreas, the liver, the bile ducts and the nerves controlling them. The unabsorbed fat passes off with the feces. The maximum amount of fat absorbed by any one person is in the neighborhood of six grams per hour.

The exact process in the absorption of fats is not known. The fatty globules when mixed with the pancreatic juice and the bile, are not chemically changed, but it is supposed that they are absorbed as small droplets of uniform size, partly by the blood capillaries in the mucous lining of the intestines and the stomach, but the large proportion is absorbed by the lacteals of the small intestines and thus carried into the blood current through the lymphatic duct.

(See Figures 37 and 29 of the Blood Formation plate of the Body Manikin.)

In tracing the fats from the stomach and the intestines, in their course into the blood plasma, out among the tissues, physiologists have not bridged the chasm between the entrance of the fat into the venous system and its ultimate landing in the blood plasma.* After absorption of the fat into the blood capillaries of the portal

veins, and into the lacteals from the intestines, which reaches the blood stream by way of the lymphatic ducts, it is almost entirely lost sight of as fat, a very small quantity of fat being found in the blood current. The carbon, which was the chief element of the fat, is, however, still within the blood stream; in just what form or combination, or whether it is free, is not known, but in the blood stream it is not in the form of fat. It is probable that this fat is dissolved into its constituent elements of carbon, hydrogen and oxygen, and carried into the lymph spaces as such.

If the process of assimilation of the lymph, which surrounds all tissues, and into which the carbon oozes out from the blood capillaries,* proceeds normally, a normal amount of carbon present in the lymph will be organized into bone and other connective tissues, as well as entering into the formation of all of the supporting structures of the glands, the nervous system, the skin, the hair, etc.; but if the nerve impulse coming to these cells be weak, their assimilative process will also be weakened; there will be a consequent decreased activity of the tissues, which results in the failure to cause a combustion of the waste, into carbonic acid gas and urea, and the unused carbon floating in the blood, if not burned up as waste, will be united again with oxygen and hydrogen to form fat.

Some of the real waste, in normal metabolism of the cells, becomes fat and is not fully burned up, but reaches only the stage of the free carbon in fat formation.

Adipose tissue, when examined microscopically, is shown to consist of little bladders, or vesicles filled with fat. The large amount of it stored in the system is due not so much to fats (hydro-carbon) consumed as such, as to the carbo-hydrates (sugars and starches), which are converted into fats. Fats and carbo-hydrates are made up of the same constituent elements—carbon, oxygen and hydrogen—the only difference being that there is a larger

*Publisher's Note: See lecture by Miss Cocroft upon "The Circulatory System."

amount of hydrogen in the fats. In carbo-hydrates the hydrogen and oxygen are in proper proportions to form water, while in fats there is not sufficient oxygen to do so. This is one reason why full breathing is encouraged.

The digestion of carbo-hydrates, as well as of proteids, is influenced very materially by the condition of the stomach, the intestines and the liver. The sympathetic nerves of the stomach are very responsive to disturbances in any other part of the body, being directly connected with the sympathetic nerves of the pelvic organs; hence digestion is influenced by many causes outside of the digestive system.* It is influenced directly by our thought.

Normal metabolism or assimilation requires a proper supply of food, in quantity and quality, and the regular removal of the effete products, which must be given out through the excretory organs, the lungs, the kidneys, the skin and the intestines.

The lungs excrete carbonic acid gas and watery vapor.

The kidneys excrete urea, water, uric acid and salt.

The skin excretes water, and a small quantity of carbonic acid gas and fatty matter.

The intestines excrete insoluble salts and the residue of the food.

The daily income of the body is through:

The lungs, which take in oxygen.

The digestive tract, which takes the food—water, salt, proteids, carbo-hydrates and fats.

When the income of the body exactly equals the expenditure, the body is said to be in equilibrium. The regaining of the equilibrium between the income and the excretions in obesity, by creating normal assimilation and thus correcting the tendency to store up too much fat, must rest in regulating the stomach, the intestines, the pancreas, the liver and the nerves controlling all tissues, so that the anabolic or constructive activity be normal, and in strengthening the action of the lungs, intestines, kidneys and the skin, that the waste may be freely eliminated.

*Publisher's Note: See lecture upon Stomach, Liver, Intestines and Kidneys.

**Causes of
Corpulency.**

The conditions favoring corpulency are:

- (1st) An inherited tendency, which tendency can be corrected.
- (2nd) Too much food—a diet rich in proteids, with a corresponding amount of fats and carbo-hydrates—though this is not always the case, because many women who store up an abnormal amount of fat are light eaters.
- (3rd) Insufficient exercise and a consequent hoarding of the waste of the system.
- (4th) Insufficient breathing capacity, with a corresponding lack of oxydation.
- (5th) Too much liquid at meals, which increases the absorption and digestive activity.
- (6th) Weakened nerves, which imperfectly excite activity of the tissues.
- (7th) A cessation of the menses.
- (8th) Diminished mental activity—phlegmatic temperament and a consequent diminished activity of the nerves. (Vigorous mental work, excitable temperaments, care and sorrow cause the deposition of fat through nerve activity.)
- (9th) A diminished amount of red blood corpuscles, which are the great exciters of oxydation in the body.
- (10th) The consumption of alcohol, as the alcohol is easily oxydized and thus the fat is not needed for heat or energy.

Some theorists state that a secretion is manufactured in certain cells of the body (possibly in the thyroids), which regulates the amount of fat in any individual, but this theory is not fully substantiated.

**Relief from
Corpulency.**

The reduction of fat by muscular activity, reasonable diet and complete oxydation through forceful circulation and deep breathing is the only rational method.

The fatty globules stored up in the system are liberated by muscular activity; the oxygen uniting with hydrogen forms water, and, uniting with the carbon in the fats, causes combustion, resulting in the separation of carbonic acid gas, uric acid and water; then by quickening the circulation, the carbonic



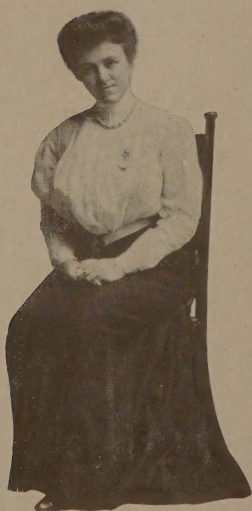
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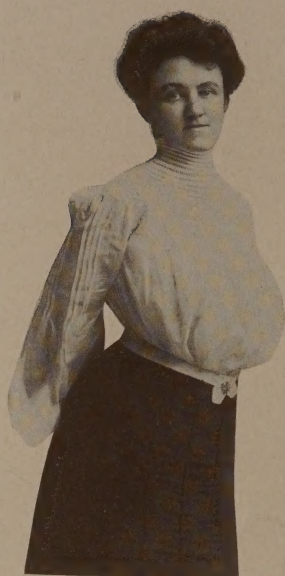


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FIGURES 13, 14 AND 16 ILLUSTRATE COMMON INCORRECT ATTITUDES; THE DIFFERENCE IN STYLE GIVEN TO A SHIRT WAIST SUIT WILL BE NOTED BY COMPARING 13, 14 AND 16 WITH FIGURE 12, WHICH IS IN CORRECT POISE, OR BY COMPARING 17, INCORRECT SITTING POSTURE, WITH 15, CORRECT POSITION. SEE PAGES 12 AND 15.



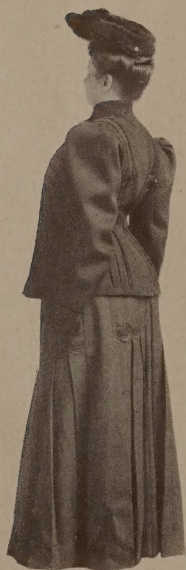
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21



22



23

FIGURES 18, 19 AND 20 ARE IN CORRECT POISE. FIGURE 20 SHOWS THE SAME GOWN AS FIGURE 8. SEE PAGE 12.

FIGURES 21, 22 AND 23 SHOW THE DIFFERENT APPEARANCE OF A COAT UPON THREE WOMEN OF ABOUT THE SAME WEIGHT. SEE PAGES 11 AND 12.

acid gas and water are thrown off by the lungs and the skin, the uric acid and water by the kidneys. If the fat is not then re-supplied in as large quantities as are consumed, the patient is brought to normal weight. When the latter is once regained, it can be retained by a judicious amount of exercise.

Drugs or medicine for the relief of corpulency are unsafe. They may have a deleterious effect upon the kidneys and the digestive system, and a consequent reaction upon the heart, while exercise for reduction can be given in such a way as to strengthen these organs.

Since the capacity for the absorption of fat daily is limited, we are not so much concerned in the exact process of assimilation and absorption as we are in activity to oxydize and eliminate the carbon stored up.

The relief of corpulency, then, rests in:

(1st) The diminution of the amount of food taken into the system;

(2nd) The increase in the amount of exercise, both mental and physical;

(3rd) The increase in the breathing capacity;

(4th) The limitation in the amount of liquid consumed;

(5th) The regulation of the amount of cold, both in air and water;

(6th) In cases of anæmia, an increase of the red blood corpuscles;

(7th) Strengthening the nerves, to increase activity of the tissues.

**Permanency
of Reduction.** While the patient is working for relief of this fat, she will have formed habits of daily exercise, forceful circulation and correct breathing, which will keep up the necessary activity for the proper assimilation and oxydation, and the habits of bodily activity to which she has become inured will become not only a necessity, but a pleasure. Much time is wasted by trying to reduce by walking. One can get better and more effective exercise by fifteen minutes' practice of the right kind of movements in her own room than in a five-mile walk.

It is an easy matter to keep the body in normal flesh.

It is erroneous, however, for a person to expect to reduce to stay reduced, so that the system will never go back to its old habits, if she neglect a judicious amount of exercise; but it is just as easy to form habits of daily exercise as to form habits of eating and of bathing, and exercise becomes a pleasure.

Diet for The idea that one needs become weakened in following a diet for the reduction of fat is erroneous.
Reduction
Strengthens. The exercise necessary to create a combustion of the fatty globules improves the general functioning powers of the system. It strengthens all of the vital organs, strengthens the heart, the lungs, the nerves, and increases mental vigor.

In regulating the diet for reduction, the fats and carbohydrates should not be entirely cut off; the quantity and quality of food should be regulated according to condition.

Fats and carbo-hydrates do not produce strength of the tissues. The proteid diet is the strengthening diet. A proteid diet increases the amount of oxygen in the system, while fat decreases it; yet it is a mistake to follow a proteid diet alone. Proteids also are changed to fats, and one cannot maintain the equilibrium of metabolism on a purely flesh diet. A healthy person daily excretes from eight to nine ounces of carbon in the form of carbonic acid gas in the expired air, through the skin, the urine and in the fœces, so that in order to obtain this from a purely flesh diet, one would be obliged to eat about four and four-tenths pounds of beef a day, and the digestive system would not stand this for any length of time.

Tea and coffee do not produce fat, and where the diet is limited in many cases, depending upon individual conditions, they are often beneficial, inasmuch as they excite the circulation and thus increase oxydation and elimination.

It is injudicious for any woman to attempt to diet herself for the reduction of fat, because many individual conditions must be taken into consideration. Each person should be given intelligent individual treatment, and

the diet and exercise should vary according to the conditions.

In young people under twenty, the diet should be intermittent and should not be prolonged unduly; in old people of seventy or eighty, the reduction should be more gradual than in middle life.

With exercise and a reasonable diet, adapted to the conditions of each individual, on an average of about ten pounds of fat a month can be removed and the patient gain in strength in proportion to the amount of weight relieved.

**Diet Alone
Not Sufficient.** While a diet restricting the amount of food taken into the system, if sufficiently limited, will cause no more fat to accumulate than the system can relieve, yet regular exercise and full breathing is necessary to eliminate the waste, and to cause the combustion of the fatty globules now stored up. In attempting to reduce by diet alone, without the increased muscular activity, the habit of metabolism is not changed, nor are the digestive forces quickened, so that the patient, as a rule, gains more rapidly in assuming a normal diet. To reduce by exercise alone, while still storing the system with more fat than it can daily carry off, requires hard muscular exercise, indeed, to use up the carbon daily resupplied.

**Breathing
and
Oxydation
of Waste.** The importance of deep breathing in connection with bodily activity, to create a ready combustion of the carbon, as well as of the waste of the system, has been shown. As fat is packed about the heart and lungs, the breathing becomes more shallow, and consequently less oxygen is taken into the system and less waste removed from it; thus, as a woman begins to show a tendency to the accumulation of fat, she should guard her habit of breathing, else, as the breathing capacity decreases, less fat is oxydized and the fat accumulates rapidly. A large amount of fat stored in the system diminishes the oxydation, because of the lack of metabolic activity of the cells themselves. With an abnormal amount of flesh, there should be more waste matter, consequently the lung capacity should in-

crease rather than decrease. The average woman who carries too much fat takes in about one-third of the oxygen required for the complete combustion of waste.

The lungs of each normal individual are of sufficient size to take in enough oxygen for this complete combustion, if they be unrestricted by fat, poise or clothing.

Effect of Cold.

Fat is simply fuel for the body to create heat and energy, and the amount of fat stored up is influenced by the temperature. More fat is required in high altitudes to keep the body warm, hence there is more combustion of fatty globules in a cold atmosphere than in a warm. This is one reason, also, for cold baths as an agency in the combustion of fat, because more heat is necessary to react from the cold produced; yet all fleshy women, on account of other physical causes, should not indulge in the cold bath.

Circulation.

If the circulation is below par the normal amount of blood is not brought to the lungs, to throw off the carbonic acid gas and to gather oxygen; hence as the blood is the oxygen-carrier, sufficient oxygen is not carried to the tissues. The circulation is also effected by the nerves.

Fatty Degeneration of Heart.

A small excess of fat may not cause much discomfort, but the tendency is indicated, and may ultimately result in a breaking down of the muscular tissues. Fatty degeneration of the heart is a change in the muscular fibre in which the transverse striæ are replaced by the globules and granules of fat. It is caused by an impaired nutrition, prolonged anæmia, chronic gout, alcoholism, diseases of the coronary arteries, tuberculosis, phosphorus poisoning and cancer.

Where there is danger of the failure of the heart because of the accumulation of fat, the cardia muscles should be regularly strengthened by exercise. The circulation thus becomes quickened and metabolism increases.

In fatty degeneration, globules are deposited in the muscular fibres, in the glandular cells of the liver and kidneys, in the cartilage cells, in the lymph and pus cor-

puscles, as well as in the nerve fibres. This degeneration often occurs after severe fevers or after artificial heating of the tissues.

Infectious diseases, heart lesions, pulmonary troubles, renal diseases and over-exertion are more serious in cases where the fat is above normal. Cases of extreme obesity are apt to be complicated with diseases of the circulatory system, the kidneys, the lungs, the organs of locomotion, the nervous system, rheumatism and gout.

Loss of Mental Force. An undue number of fatty globules stored about the nerves presses upon them and dulls the action of the nerve area of the brain corresponding to the nerves interfered with. Consequently many who store up an abnormal amount of fat lose their will-power, their brains become dull, sleepy and logy. Muscular activity, which is necessary to create a normal state, thus requires more effort. The memory also often becomes impaired. In correct exercise for brain strength the mind is kept firmly fixed upon the muscles being used and a strength of nerve, with a power of mental concentration, is developed.

Mind Must Be Active. Many ineffectual efforts are made to reduce by massage movements; as a rule, these movements are only for certain parts of the body, while for permanency of results, the work of the entire assimilation must be changed. Massage to be effectual must be daily, for all parts of the body, and be kept up for months. One can get a better massage of the vital organs by exercise directed to them, than by manipulation by another's hand, because where one is mentally directing exercise for movement of the vital organs, the mind works with the body, and the nerve activity is thus increased.

A woman will succeed better in the reduction of fat by daily work in her own room than in a class. In exercising in class she works by imitation of her teacher, and her mind is not consciously held upon the work she is trying to do; besides, the class work may not be adapted to her condition. In work in her own room, upon exercises adapted to her case, her mind is held closely upon the

exercises as she watches the muscular activity in her mirror, in response to the mental impulse; it is the mental activity, as well as the physical, which brings best results. This is one reason why instruction through correspondence has been so eminently successful.

Rapid reduction cures are not desirable, because the body cannot change its habit suddenly. It is by persistent, regular following of definite instructions that lasting results are attained. Ten pounds a month is sufficient.

Distribution of Flesh.

The question of the distribution of fat depends entirely upon the bodily poise. We are constantly being told, that "the favorite parts of the body, intended by Nature for the storing up of fat, are over the abdomen and across the shoulders," but the fat never unduly accumulates across the shoulders if the head and shoulders are carried correctly. Neither does fat unduly accumulate over the abdomen if the hip joint is properly poised in standing and in sitting, and the rib-cage properly expanded.

The fat succumbs to the force of gravity and settles along the lines of least resistance. When the head is carried forward, there is no resistance to the accumulation of fat across the shoulders. When the thigh joint is forward, there is no resistance to the accumulation over the abdomen; but if the hips be properly poised, and the muscles of the abdomen strong, there is a regular contraction and relaxation of these muscles with each inhalation, and in walking these muscles receive a normal amount of exercise.

Figures 2 and 3 show the change in the outlines made by a pupil in four months of exercise, breathing, bathing and a judicious diet; this woman would not have back her abnormal amount of fat for many times the amount of work occasioning its loss. She is perfectly healthy, perfectly strong and feels ten years younger—it is needless to say that she looks younger.

The reduction of 53 pounds in the student shown in Figures 28 and 29 was made in five months. Surely this

student looks 15 years younger. Her friends who had not seen her for a few months scarcely recognized her.

The change in the young woman of Figures 24 and 25 show an entirely different future opened up to her. This change was made in about six months.

The photograph for Figure 31 was taken November 10th, and that for Figure 32 in the following May,—a reduction of 58 pounds.

The womanliness and change in purpose expressed in the faces of these pupils show most effectually the reaction of bodily vigor upon mental and spiritual tone. This mental awakening, with the entire change in the vantage point of life, is shown conclusively in Figures 26 and 27. The strength of brain force developed there is marvelous.

The figures here represented are a few among ten thousand of cases which have been reduced in this way. It takes strength of character and definiteness of purpose to change any bodily habit, but the work is enjoyable and pays richly.

**Mental
Satisfaction.**

The mental satisfaction in studying the work out for herself, and the knowledge that she can completely control this physical body, is more than half of a woman's gratification. She is perfect mistress of herself, as she knows how to retain her health and figure, and she realizes that if at any time she should be injudicious and the fat should return, she can remove it. In learning how to remove it, she quickens her circulation, strengthens her nerves, develops her breathing power and strengthens the heart, the lungs and every vital organ; she learns how to stand and to carry herself so as to lend style to her clothes. With regulative exercise, therefore, and the intelligent study of her diet, she is, to a large degree, mistress of the metabolism of her own body.

Work for reduction becomes a real pleasure, not a task. The whole body becomes vibrant with life-force, deep breathing becomes a pleasure, and life takes on a more definite aspect.

LEANNESS.

Any woman, unless vitally sick with acute disease, which must be first cured, can put on flesh, can round out bony neck, chest, arms and hips, and can develop the breasts to normal size, if she is willing to follow a few hygienic rules intelligently laid down for her. The treatment must be individual, because the causes for the lack of flesh are so varied, and the causes must be relieved before the results will change.

To fill up the hollows of the neck and chest and to develop the breasts, one must learn the correct poise, not only of the head and chest, but of the entire body, and must establish habits of correct breathing, of correct poise in sitting and of carriage.

There are many artificial means of developing the breasts, but they will not stay developed until the poise is correct. The breasts, through the sympathetic nerves, must often be reached by strengthening the pelvic organs, the entire nervous system, and by building up the vitality. The fallacy of attempting to build up the breasts by massage alone, by ointment or by the cupping system is apparent, as these do not correct the cause.

After a careful reading of the causes and relief of obesity, it may be inferred that the opposite treatment would be the natural relief of the other extreme. However, this is not entirely true. The treatments for both obesity and leanness strengthen weakened vital organs, and free all bodily restrictions by creating a good circulation and an activity of all excreting organs, so that impurities be fully eliminated; yet, in their essentials in the kind of exercise, rest, diet, etc., they are dissimilar, according to the causes.

The causes which interfere with the proper nourishment of the tissues and the consequent rounding out of the figure are:

(1st) The failure to regulate the amount of food which the digestive system will handle.

(2nd) Erroneous habits of eating at irregular intervals. The digestive system, as well as every other part

of the body, forms habits, and it must have regular rest, alternated with regular exercise.

(3rd) Insufficient mastication of the food; the food must be sufficiently ground and properly mixed with saliva before it enters the stomach; no amount of pepsin or diastase as medicine will replace saliva as a digestive fluid.

(4th) An insufficient amount of liquid taken with the meal or near meal time. The liquid should not be used to wash down poorly masticated food, so that it is not freely mixed with the saliva, but should be taken at regular intervals during the meal period and before and after meals. The stomach works better when it is full, and liquid taken with the meals brings a better activity of the cells of the mucous linings of the stomach and intestines, thus the digestive juices are more freely secreted into the intestines and the stomach and the digestive process is aided.

(5th) Improper food, which does not give a sufficient amount of fats and carbo-hydrates, in proportion to the amount of proteids. If the diet consists largely of proteids, with very little fats and carbo-hydrates, all of the fats consumed in the carbo-hydrates will be used up in the production of heat and none will be stored between the tissues. On the other hand, a sufficient amount of fats and carbo-hydrates may be consumed, but their nutritive value may be counteracted by the tanna in tea, by vinegar or other too strong acids.

(6th) Improperly cooked food, which renders it unwholesome and difficult of digestion; much food is spoiled in the cooking.

(7th) Feeble or disordered digestion from any cause. When the digestion is weak, care should be taken to have all the starchy foods well cooked. Pickles, vinegar, tea, coffee and acid fruits, too much confection and pastry should be avoided.

(8th) A monotonous diet also retards digestion, because the stomach responds very quickly to the state of the mind. Tastily-prepared dishes put before one invitingly are the best of appetizers. Many women fall

into ruts in preparing food; they also serve them in a manner which does not invite the appetite; many women also become so tired of food of their own cooking that the nerves of the stomach reject them and the system does not assimilate them.

(9th) Overwork interferes with digestion and uses up the body tissues. An abnormal amount of work, whether mental or physical, requires an immense amount of energy, and when the fats and the carbo-hydrates have all been consumed in energy, the proteids and the tissues themselves are used in this re-supply.

(10th) Nervous exhaustion renders the digestive system incapable of utilizing the food prepared by the digestive organs.

(11th) An over-strenuous condition of the nerves, which holds the digestive organs so tense that the nourishment does not properly pass out into the natural channels, and is carried off with the fœces; by holding the cells about the tissues tense, the food digested will not assimilate.

(12th) Insufficient breathing. Regular habits of breathing have everything to do with regulating the digestive system. In correct breathing, every inhalation gives the stomach, liver, spleen, pancreas and intestines their natural physical exercise and this natural exercise is necessary for their proper functioning.

There are many people who are apparently in good health, and whose nerves are apparently normal, who remain thin. This may be an inherited tendency, but it can be corrected by a liberal diet of carbo-hydrates and fats, with a change in the habits of regulative exercise, followed by complete relaxation.

Tense
Nerves.

Perhaps the large majority of excessively lean cases, not caused by emaciation as the result of an acute illness, are due to an over-strenuous condition of the nerves, which affects not only the digestive organs, but interferes with the proper absorption and assimilation. In an over-tense condition of nerve the circulation is impeded and the nutriment does not freely enter the lymph spaces to be absorbed by the tissues.



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FIGURE 24 REDUCED TO FIGURE 25 IN SIX MONTHS. SEE PAGE 35.
 FIGURE 26 REDUCED TO FIGURE 27, A REDUCTION OF FORTY POUNDS IN FOUR AND A
 HALF MONTHS. SEE PAGE 35.



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FIGURE 28 REDUCED FIFTY-THREE POUNDS TO FIGURE 29 IN FIVE MONTHS. SEE PAGE 34.
 FIGURE 31 REDUCED FIFTY-EIGHT POUNDS TO FIGURE 32 IN SIX MONTHS. SEE PAGE 35.
 FIGURES 33 AND 34 SHOW THE CHANGE IN A YOUNG GIRL IN A FEW MONTHS. SEE PAGE 10.

The assimilation of fat depends upon the activity of the muscular tissues (see page —), and in a large number of cases the nerves are held so tense that the tissues are just as rigid as the nerves and the fat cannot accumulate between the muscular fibre, or if it does, so much energy is wasted that it is worked away as fast as formed.

When muscles and nerves are held tense, there is a greater mental concentration and more energy is used up in walking a block than is needed to walk six. Much force is also wasted in the tensity of jaw and throat in talking. Nerves are held tense even during sleep, so that an unconscious movement during sleep wastes force.

Such people need to learn the gospel of relaxation, and exercise for building up and rounding out their muscles should be directed to freeing nerve centers, to forming habits of relaxation after effort, to relaxing nerves to the digestive system, with care to rest, breathing and bathing, according to the condition.

Mental relaxation, as well as physical, must be encouraged, because where the mind is held tensely the tissues of the body, as a rule, are held rigid, the circulation is retarded, the blood plasma is not freely secreted about the tissues and both tissues and nerves become undernourished.

More blood plasma oozes out into the lymph spaces for absorption by the tissues during rest after exercise. The tissues dine after exercise, and complete rest and relaxation should be encouraged then, so that the lymph may thoroughly surround and nourish each one. Impoverished nerves, as well as impoverished muscles, are then nourished.

Effect of
Foods.

Perhaps ninety per cent of the difficulties with women arise from some trouble with the digestive system; these troubles are often reflex, as difficulties with other organs affect the nervous system and, through the sympathetic nerves, the stomach and intestines.

While one cause for obesity is the abundance of food, one cause for leanness is also more food than the digestive

system can handle. Thus the walls of the stomach and the intestines become weakened, resulting in an excess of mucous upon their linings, preventing circulation and a free secretion of gastric juice, stopping up the gall duct, so that the absorption of the nutriment into the lacteals is retarded, as well as the elimination of bile into the intestines. This is especially true in catarrh of the stomach and bowels.

Often the thin person will put on more fat by having the diet cut down one-half than by increasing it one-half, depending upon the over-worked condition of both stomach, liver and intestines. It is the amount of food absorbed and assimilated, not the amount eaten, which tells.

One chief cause for leanness is in the torpid action of the liver, so that the bile is not poured into the small intestines at the time the fatty food enters them, the bile being necessary to put the fats in condition for absorption.

The intestines must be kept strong and freely open, that the cells about them be free for absorption of nutriment.

Thin people build up more from a diet consisting of a large proportion of carbo-hydrates, with a reasonable amount of proteids and fats, than from an abundance of fats, as might be supposed. Since the system will assimilate only a limited supply of fat, an abundance over the necessary amount for heat and energy is superfluous. Carbo-hydrates well cooked are readily converted into fats, and are stored up in the system to be used as needed for heat and energy.

For perfect health, we do not need much fat, but we do need well-rounded, well-nourished nerves and tissues.

By the regulation of daily habits of exercise, rest (mental and physical), breathing, bathing and diet, any system can be built up to roundness and symmetry. It takes a longer time, as a rule, to build up a thin body than to reduce it, because it takes a longer time to regulate our nerve habits than it does the habits of other tissues.

